

AF IFW



Docket No.: KCC-14,829

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellants: Raymond Jeffrey MAY, et al.

Serial No.: 09/855,188

Filing Date: 14 May 2001

Title: TARGETED ELASTIC LAMINATE
HAVING ZONES OF DIFFERENT
POLYMER MATERIALS

Confirmation No. 8199

Customer No. 35844

Group No. 1771

Examiner: N. Velazquez

APPELLANTS' REPLY BRIEF UNDER 37 CFR 41.41

Mail Stop Appeal Brief - Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Appellants herewith file their Reply Brief in the above-identified case, in response to the Examiner's Answer mailed 14 November 2005. Appellants respectfully submit that the Examiner's assertions are incorrect as a matter of law and fact. Thus, for the reasons set forth below, Appellants respectfully request that this Board reverse the rejections of Claims 1-17, 19-21, and 50-59 under 35 U.S.C. §103(a).

I hereby certify that this correspondence (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop Appeal Brief - Patents, United States Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 on

January 12, 2006

1/12/06
Date


Signature

In the Examiner's Answer, the Examiner reiterated the rejections under 35 U.S.C. §103(a) presented in the final Office Action mailed 16 May 2005, and then presented a response to Appellants' arguments presented in the Appeal Brief. Appellants reply to the Examiner's response as follows:

1. THERE IS NO SUGGESTION OR MOTIVATION TO COMBINE THE TEACHINGS OF MELBYE ET AL., CEDERBLAD ET AL., AND BEITZ ET AL.

Despite the fact that *Melbye et al.*, *Cederblad et al.*, and *Beitz et al.* all involve elastomeric filaments, Appellants maintain that there is no suggestion or motivation to dissect the concept of using strands of different compositions from the elastomeric netting of *Cederblad et al.* and the concept of a barrier layer from the gusset-flap member of *Beitz et al.*, and to insert these concepts into the elastic sheet-like composites of *Melbye et al.*

None of the cited references suggest that different elastomeric compositions can be used to create different "zones" of elasticity akin to using different quantities of strands or thicker and thinner strands. *Cederblad et al.* include strands having different elastomeric compositions, but the overall material in *Cederblad et al.* has uniform elastic properties with no "zones" of differing tension.

Appellants appreciate the Examiner's attempt to extract merely the concept of strands having different elastomeric compositions from *Cederblad et al.* and to insert the strands into the *Melbye et al.* composites. However, only through the use of impermissible hindsight would a person skilled in the art even consider using the strands of *Cederblad et al.* in an application in which (a) the strands do not intersect and (b) the strands are bonded to facing materials. There is absolutely no suggestion or motivation to apply the strands of *Cederblad et al.* in such manner, particularly since (a) *Cederblad et al.* is directed to a material having ***uniform tension*** across the MD as well as ***uniform tension*** across the TD attributable to the intersecting grid-type configuration of the strands, and (b) *Cederblad et al.* distinguishes the elastomeric netting from materials bonded to facing materials, thereby ***teaching away from bonding the elastomeric strands to facing materials.***

Appellants' arguments based on the type of extruder *Melbye et al.* use to produce the elastic strands is pertinent because the *Melbye et al.* invention includes the method of making the material therein, and one of the attributes of the invention of *Melbye et al.* is that the method affords "versatility in selecting characteristics of the elastic sheet-like composites to be produced without major modifications of the equipment." (Page 2, lines 3-8). Thus, it would be contrary to the intended purpose of *Melbye et al.* to form an elastic sheet-like composite having at least two different types of strands made from at least two different types of materials because separate extruders and/or dies would be required to apply the different materials, and the addition of more extruders and/or dies would be a major modification of the equipment. Despite Appellants' claims being product claims, the fact remains that the product and process in *Melbye et al.* are interrelated. More particularly, ***there is no suggestion or motivation to modify the product of Melbye et al. if, by doing so, the modifications required to form the product would be repugnant to the intended purpose of the process.*** Thus, there is no suggestion or motivation to modify *Melbye et al.* in the manner suggested by the Examiner.

Contrary to the Examiner's assertion, there appears to be no suggestion or motivation to provide a liquid impermeable barrier layer in the *Melbye et al.* composite based on the gusset-flap member in *Beitz et al.* More particularly, the gusset-flap members in *Beitz et al.* are not formed as a sheet-like composite, but instead are formed as separate components specifically configured for application to a garment. The leg gussets may include a barrier layer with a first arrangement of elastomeric members positioned between the barrier layer and the fabric layer within a leg gusset section of the gusset-flap member, and a second arrangement of elastomeric members attached to at least the fabric layer within a containment flap section of the gusset-flap member. However, ***there is no suggestion in Beitz et al. to form the gusset-flap member as a sheet-like composite***, thus there is no suggestion or motivation to extract the barrier layer from the gusset-flap member and insert the barrier layer into the sheet-like composite of *Melbye et al.*

As indicated by the Examiner, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference. Rather, the test is what the combined teachings of those references

would have suggested to those of ordinary skill in the art. For at least the reasons explained above as well as in the Appeal Brief filed 15 September 2005, Appellants maintain that there is no suggestion or motivation to dissect the concept of using strands of different compositions from the elastomeric netting of *Cederblad et al.* and the concept of a barrier layer from the gusset-flap member of *Beitz et al.*, and to insert these concepts into the elastic sheet-like composites of *Melbye et al.*

2. MELBYE ET AL., CEDERBLAD ET AL., AND BEITZ ET AL., WHEN COMBINED, FAIL TO TEACH OR SUGGEST ALL OF APPELLANTS' CLAIM LIMITATIONS.

Yet another factor in establishing a prima facie case of obviousness is that the prior art references, when combined, must teach or suggest all the claim limitations. Neither *Melbye et al.* nor *Cederblad et al.* nor *Beitz et al.*, alone or in combination, disclose or suggest a targeted elastic laminate material having different zones of tension, with **filaments in one zone having a different composition than filaments in a second zone**. Furthermore, neither *Melbye et al.* nor *Cederblad et al.* nor *Beitz et al.*, alone or in combination, disclose or suggest a targeted elastic laminate material having filaments of different compositions bonded to a facing material, wherein the **different types of filaments run in the same longitudinal direction**. Although *Cederblad et al.* disclose elastic strands of different compositions, there are no “zones” of different tension or “zones” of different compositions. As explained above, in *Cederblad et al.* the strand composition is constant in the machine direction as well as in the transverse direction, such that all of the MD tension is uniform and all of the TD tension is uniform. Even if *Melbye et al.* were combined with *Cederblad et al.* and *Beitz et al.*, the combination would still fail to achieve the targeted elastic laminate material of the present invention because neither *Melbye et al.* nor *Cederblad et al.* nor *Beitz et al.*, nor any combination thereof, discloses or suggests the combination of strands of different elastic polymers applied in the same longitudinal direction between two facing materials to provide zones of varying tension, along with a barrier layer positioned between at least a portion of each of the facing materials.

3. MLEZIVA ET AL. FAIL TO OVERCOME THE DEFICIENCIES OF MELBYE ET AL., CEDERBLAD ET AL., AND BEITZ ET AL.

As explained above, there is no suggestion or motivation to combine *Melbye et al.*, *Cederblad et al.*, and *Beitz et al.*, to achieve a combination of strands of different elastic polymers applied in the same longitudinal direction between two facing materials to provide zones of varying tension, along with a barrier layer positioned between at least a portion of each of the facing materials.

Melbye et al., *Cederblad et al.*, and *Beitz et al.* further fail to disclose any elastic tension relation between the low tension zone and the high tension zone, they do not disclose employing an elastomeric adhesive to bond the facing layer and the filaments, and they do not disclose using a spunbond material or a meltblown continuous filament composite web for the facing material.

The Examiner suggests that it would have been obvious to one of ordinary skill in the art to use the extrusion processes disclosed in *Mleziva et al.* to create the facing materials recited in Appellants' Claims 16 and 17. The Examiner also suggests that it would have been obvious to one of ordinary skill in the art to use an elastomeric adhesive to bond the low and high tension zones to the facing material because *Mleziva et al.* disclose adhesive bonding of fibers to facing layers as an alternative method to autogeneously bonding the layers and strands.

However, as pointed out above, *Melbye et al.* emphasize a process that involves no major modifications of the equipment. Since the composites in *Melbye et al.* are formed by extruding strands of molten thermoplastic material onto the sheet of material to form elastic strands thermally bonded to the sheet of material, major modifications would be required to instead adhesively bond elastic strands to a sheet of material. Additionally, *Cederblad et al.* teach away from the whole concept of bonding a facing material to elastic strands. For these reasons, and the other reasons presented above, the combined teachings of *Melbye et al.*, *Cederblad et al.*, *Beitz et al.*, and *Mleziva et al.* fail to disclose or suggest the targeted elastic laminate material of Claims 16, 17, and 19 of the present invention.

**4. APPELLANTS MAINTAIN THEIR POSITION IN ARGUMENTS I AND II
IN THE APPEAL BRIEF.**

The Examiner has indicated that she maintains the grounds of rejection presented on appeal. Likewise, Appellants maintain their position in arguments I and II in the Appeal Brief. For at least the reasons presented in the Appeal Brief and as restated above, Appellants respectfully request the Board to overturn these rejections.

CONCLUSION

For the reasons presented above, Appellants respectfully submit that the Examiner's Answer does not overcome Appellants' Appeal Brief. Therefore, Appellants respectfully request that the Board reverse the rejections proposed by the Patent Office.

Respectfully submitted,



Melanie I. Rauch
Registration No. 40,924

Pauley Petersen & Erickson
2800 West Higgins Road
Suite 365
Hoffman Estates, Illinois 60195
(847) 490-1400
FAX (847) 490-1403